

Curriculum Intent:

In year 7, students are introduced to the school system to enable them to access the schools ICT systems successfully, including be able to retrieve documents from student resources, save their work and use e-mail effectively. They will then be introduced to units of work which will build on their skills and knowledge throughout KS3. The scratch unit will build on coding skills acquired at KS2 and further enable students to work independently using coding blocks to design their own game. The E-safety unit forms a fundamental part of the KS3 curriculum and will encourage the development of new ideas to keep safe online, each year. We will also touch upon animation as this unit of work has links to KS4 and further education.

Year 7	HT1	HT2	HT3	HT4	HT5	HT6
<p>Content, Knowledge & Skills</p> <p>Students will learn how to access software and student resources. They will also learn how to save and submit their work.</p> <p>Students will be taught how to use the school e-mail system and teams.</p>	<p>Introduction to school systems/E-mail/Teams</p> <p>Students will learn how to access software and student resources. They will also learn how to save and submit their work.</p> <p>Students will be taught how to use the school e-mail system and teams.</p>	<p>Scratch-Create your own Pacman game</p> <p>Students will learn how to code using Scratch software.</p> <p>Students will understand data flow diagrams and learn how to sequence a set of instructions.</p>	<p>Scratch-Create a game using advanced skills</p> <p>Students will build on skills from HT1 and develop an understanding of the advanced features of code such as loops, variables and lists.</p> <p>Students will develop their own games independently using skills and knowledge from HT1 and advanced skills.</p>	<p>E-Safety-Create an E-safety poster with top tips.</p> <p>Students will learn to stay safe on-line by exploring the risks of phishing e-mails, malware and hacking.</p> <p>Students will gain an understanding of safe internet use.</p> <p>Careers Week Students will explore jobs in the gaming industry and career pathways, as students have been learning to create their own games using code. They will create a presentation identifying job roles, salary and pathways.</p>	<p>Spreadsheets-Create your own model using functions and formulas.</p> <p>Students will learn to use formulas and functions in excel.</p> <p>Students will create a model using excel and apply formatting skills.</p> <p>IF statements will be used for more complex formulas.</p>	<p>Animations-Create your own animation using Pivot software.</p> <p>Students will learn about the purpose and uses of animations in the industry. They will then create their own animation using Pivot software.</p> <p>This unit will form the bases for further units on animation as this is a core unit of work in KS4.</p>
<p>Purpose / potential links to KS4</p>	To be able to access the school systems will ease	To understand the basic principles of code.	To understand advanced coding techniques which	Be able to identify possible risks when online and know	To be able to use formulas and functions in Excel-	To learn the purpose and uses of animations. Core Unit in KS4 iMedia course.

& future steps	and use teams and email successfully.		can be applied to other software i.e Python in Y8	how to take measures to protect oneself.	widely used software-life skills.	
Key Vocabulary	E-mail	Sequence Data flow Blocks Stage Sprite Scripts	Loop Lists Variables Costumes	Hacking Phishing Malware	Formulas	Animations Motion tween Shape tween
Assessment	Ability to send an e-mail with an attachment. Ability to access documents on teams.	Assess whether the code is accurate and the students can play the game they have created.	Assess the use of variable, loops and lists within the code created.	Being able to identify risks and provide solutions for prevention.		

In year 8, students will build on their computing skills and gain an introduction to programming using Python software. This software will enable students to build on coding skills obtained in year 7 using Scratch. They will also gain knowledge and understanding of computational thinking and problem solving using algorithms etc. During this academic year, students will also use another programming language (HTML) to create a website, to give students an insight into the different programming languages. We will finish the academic year by completing a graphics unit of work, which will inter-connect with the year 9 curriculum plan, to prepare students for the skills required for iMedia at KS4.

Year 8	HT1	HT2	HT3	HT4	HT5	HT6
<p>Content, Knowledge & Skills</p> <p>Python-An introduction to coding in Python.</p> <p>Students will learn how to use Python software to code. This will build on skills acquired from the Scratch project in year 7.</p> <p>Students will learn to code using variables, lists and loops in Python.</p> <p>The project will involve creating a quiz using Python software, demonstrating skills and knowledge obtained from the previous unit.</p>	<p>Computer Science-An introduction to Computational Thinking</p> <p>Students will learn about Binary, sequencing, flow charts and algorithms.</p> <p>This unit will build on prior knowledge from year 7 scratch unit. It will cover the theory aspects of computer science in order to prepare for the next unit of practical coding.</p> <p>Computer science out be a career path leading from iMedia at KS4.</p>	<p>E-Safety-Create a presentation about Cyberbullying and how it can be tackled.</p> <p>Students will build on knowledge from year 7 and learn how to create strong passwords. They will also learn about social engineering and malware.</p> <p>Students will learn how to stay safe online and create a presentation covering the different aspects of cyber bullying namely;</p> <ul style="list-style-type: none"> • Flaming • Cyberstalking • Masquerading <p>Copyright law will be introduced as this topic has links to KS4.</p>	<p>HTML-Create a website based on attractions around Manchester for visitors/tourists.</p> <p>Students will research attractions/places to visit around Manchester and identify, opening times, booking fees, contact details etc. They will they design the layout of their website and map out the website structure.</p> <p>Students will learn how to use Dreamweaver software (HTML language) focusing on key features to be able to create a fully functioning website.</p> <p>Once complete, students will review their websites and identify strengths, weaknesses and improvements.</p> <p>Careers Week Students will look into jobs relating to Web designers and developers. They will create a presentation for the jobs identified, including the skills and knowledge required for each job.</p>	<p>Creating a digital graphic using Fireworks software.</p> <p>Students will learn how to use the tools and features in Fireworks software to create their own digital graphics.</p> <p>Fireworks software can be used to create graphics for other unit of work and therefore it is essential to learn how to create and manipulate graphics using this software package.</p>		
<p>Purpose / potential links to KS4</p>	<p>To be able to use more complex coding techniques using Python software.</p>	<p>To be able to understand computational thinking. Students can consider</p>	<p>To understand the risks of being online and identify strategies to stay safe.</p>	<p>To be able to use basic HTML code to create webpages. This unit is essential as students may choose to complete the website unit at KS4.</p>	<p>To learn to create their own graphics to eliminate copyright issues and use</p>	

& future steps	Useful for exploring pathways and subject choices for college.	computer science at college following iMedia at KS4.	Essential skills acquired as students move towards the digital world.		the skills at KS4 Digital graphics unit.
Key Vocabulary	Loops Lists Variables Integer	Algorithm Binary Sequencing Flowcharts	Cyberbullying Flaming Cyberstalking Masquerading	HTML Hyperlinks Hotspots Roll over	Marque Distort tool Lasso Tool Skew tool
Assessment	Quiz: Strengths, weaknesses and improvements identified for the Quiz created using code in Python.	Data flow diagrams: Strengths, weaknesses and improvements identified for the completed Data flow diagrams.	Presentation: Strengths, weaknesses and improvements identified for the completed presentation.	Website: Strengths, weaknesses and improvements identified for the completed website.	Digital graphics: Strengths, weaknesses and improvements identified for the finished digital graphic.

Curriculum Intent:

In year 9, we will focus on completing exemplar coursework units based on the iMedia course at KS4. This is give the students a taster of the skill, knowledge and understanding required for the iMedia course, should the students select this as an option. It will also help them make a more informed choice about their options at KS4 and decide whether iMedia is the course for them. We will also place an emphasis on career pathways required for ICT/Computing and explore potential job in industry.

Year 9	HT1	HT2	HT3	HT4	HT5	HT6
Content, Knowledge & Skills	<p>Creating digital graphics Scenario: Time chaser Game Cover</p> <p>Students will understand the basics of digital graphics Editing for the creative and digital media sector. Students will learn where and why digital graphics are used and what techniques are involved in their creation. This unit will develop the understanding of the client brief, time frames, deadlines and preparation techniques as part of the planning and creation process.</p> <p><u>Project Scenario:</u></p> <p>Your client, a game publisher called NuComputerGames, is releasing a computer game called TIMECHASER, aimed at 14-16 year olds and priced at £29.99.</p> <p>In the game the player can travel through time using doorways which are open for a limited period of time. The player has a special Timewatch to help them find the doorways. NuComputerGames plan to promote this game through an advertisement in a magazine which is available in print and online formats.</p> <p>This should be created as a digital graphic and should include a range of appropriate text and images to make it suitable as an advertisement for the game.</p> <p>NuComputerGames requires two versions of the final digital graphic. One will be of suitable quality to be used in a full colour printed magazine and will be a half page advertisement of 215 mm wide x 140 mm high. The graphic should then be re-purposed for use online at a</p>		<p>Creating a Digital animation Scenario: ‘Superfizz’ energy drink animation</p> <p>This unit enables learners to understand the basics of digital animation for the creative and digital media sector. Learners will be able to plan a digital animation to a client brief, use animation software to create the animation and be able to store, export and review the final product. On completion of this unit, learners will understand different types of digital animation techniques, know where they are used, be able to plan and create a digital animation and test and review a completed animation against a specific brief.</p> <p><u>Project Scenario:</u></p> <p>Your client needs to promote a new energy drink called ‘Superfizz’ for a target audience of 16–25 year olds. The client has asked for a digital animation that will advertise the new product.</p> <p>You should produce a short story that is made up of several scenes. The total duration of this should be between 15 and 60 seconds. The scenes may include some or all of the following:</p> <p>a person buying one of the drink bottles walking slowly down the road and removing the cap the bottle being opened so that the energy flows out drinking from the bottle the effects of the energy drink on the person.</p>		<p>Storytelling with a comic strip Scenario: SmileBrite Charity</p> <p>Comic strips are as popular today as they have ever been in their history. They have evolved from their origins in the early part of the 20th century from simple story strips to become whole genres of interest which span the world.</p> <p>This unit will enable learners to understand the basics of comic strip creation. It will enable them to interpret a client brief, use planning and preparation techniques and to create their own comic strip using digital techniques. On completion of this unit, learners will be able to explore different genres of comic strip and how they are created, plan and create a comic strip to specific requirements, and review the final comic against a specific brief.</p> <p><u>Project Scenario:</u></p> <p>SmileBrite is a charitable organisation that aims to improve the condition of children’s teeth. SmileBrite works closely with primary schools and dentists, helping children understand the benefits of keeping their teeth clean and healthy.</p> <p>SmileBrite has commissioned you to create a multipage comic strip that shows primary school age children how to look after their teeth.</p> <p>The comic strip will be distributed electronically in primary schools and printed out to be sent home with the</p>	

	<p>lower resolution. This should be 600px wide to fit the online format.</p>	<p>You have been asked to show your skills in producing the animation. This can include variations to the scenes listed above. However, the animation must promote the energy drink in a positive way.</p> <p>The animation will be used on a website so it must be in a suitable format. The maximum width of the digital animation should be 320 pixels.</p> <p><u>Careers Week</u> Students will explore jobs leading from careers in ICT/Computing and subject choices in college. Students will explore how animators work with film industry, video games, mobile devices and other forms of media using illustrations and software programs.</p>	<p>school's newsletters. It therefore needs to be in a format that can be printed without specialist software.</p>
Purpose / potential links to KS4 & future steps	<p>Practice unit of work in preparation for iMedia course at KS4. Students will need Photoshop skill at KS4.</p>	<p>Practice unit of work in preparation for iMedia course at KS4. Students will need animation skills using Adobe Flash at KS4.</p>	<p>Practice unit of work in preparation for iMedia course at KS4. Students will need to practice the use of Comic life software for KS4.</p>
Key Vocabulary	<p>Digital Graphic Composition Bitmap Vector</p>	<p>Digital animation Shape tween Motion tween Flip book</p>	<p>Genre Comic strip Client brief Stage direction Dialogue Scripts Pixel dimensions</p>
Assessment	<ul style="list-style-type: none"> • LO 1: Understand the purpose and properties of digital graphics • LO 2: Be able to plan the creation of a digital graphic • LO 3: Be able to create a digital graphic • LO 4: Be able to review a digital graphic 	<p>L01: Understand the purposes and features of animation L02: Be able to plan a digital animation earning Outcome 3: Be able to create a digital animation L04: Be able to review a digital animation</p>	<p>L01: Understand comic strips and their creation L02: Be able to plan a multipage comic strip L03: Be able to produce a multipage comic strip L04: Be able to review a multipage comic strip</p>